

**WHAT IS CLAIMED IS:**

1. A method of treatment, comprising:
  - identifying a human patient that is susceptible to ischemia; and
  - administering a sufficient amount of a nitroxide to prevent a harmful effect of ischemia in the human patient prior to the onset of ischemia.
2. The method of Claim 1, wherein the nitroxide is 4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl.
3. The method of Claim 1, wherein the human patient's susceptibility to ischemia arises from a medical procedure associated with a significant ischemic risk.
4. The method of Claim 3, wherein the medical procedure is the treatment of a hemorrhage.
5. The method of Claim 3, wherein the medical procedure is the treatment of an aneurysm.
6. The method of Claim 5, wherein the medical procedure is surgery.
7. The method of Claim 5, wherein the medical procedure is an endovascular procedure.
8. The method of Claim 1, wherein the mode of nitroxide administration is selected from the group consisting of oral and intravenous administration.
9. A method of treatment comprising:
  - identifying a patient scheduled to undergo a medical procedure involving a significant risk of ischemia;
  - administering to the patient, prior to the medical procedure, a prophylactic amount of nitroxide;
  - performing the medical procedure; and
  - administering to the patient, a prophylactic or therapeutic amount of nitroxide to ameliorate a harmful effect of ischemia.
10. The method of Claim 9, wherein the nitroxide is 4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl.
11. The method of Claim 9, wherein the medical procedure is the treatment of a hemorrhage.
12. The method of Claim 9, wherein the medical procedure is the treatment of an aneurysm.
13. The method of Claim 9, wherein the medical procedure is surgery.
14. The method of Claim 9, wherein the medical procedure is an endovascular procedure.

15. The method of Claim 9, wherein the mode of nitroxide administration is selected from the group consisting of oral and intravenous administration.

16. Use of a nitroxide in the preparation of a medicament to prevent a harmful effect of ischemia through administration to a mammalian patient prior to the onset of ischemia.

17. The use of Claim 16, wherein the nitroxide is 4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl.

18. The use of Claim 16, wherein the patient's susceptibility to ischemia arises from a medical procedure associated with a significant ischemic risk.

19. The use of Claim 18, wherein the medical procedure is the treatment of a hemorrhage.

20. The use of Claim 18, wherein the medical procedure is the treatment of an aneurysm.

21. The use of Claim 20, wherein the medical procedure is surgery.

22. The use of Claim 20, wherein the medical procedure is an endovascular procedure.

23. The use of Claim 16, wherein the mode of administration is selected from the group consisting of oral and intravenous administration.

24. A medicament for preventing a harmful effect of ischemia through administration to a patient prior to the onset of ischemia, wherein the medicament comprises a nitroxide..

25. The medicament of Claim 24, wherein the nitroxide is 4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl.

26. The medicament of Claim 24, wherein the patient has susceptibility to ischemia arising from a medical procedure associated with a significant ischemic risk.

27. The medicament of Claim 26, wherein the medical procedure is the treatment of hemorrhage.

28. The medicament of Claim 26, wherein the medical procedure is the treatment of an aneurysm.

29. The medicament of Claim 28, wherein the medical procedure is surgery.

30. The medicament of Claim 28, wherein the medical procedure is an endovascular procedure.

31. The medicament of Claim 24, wherein the mode of administration is selected from the group consisting of oral and intravenous administration.